

LOCUS PPSLN 1421 bp mRNA linear PIN (X-REF-142)

DEFINITION *P. sylvestris* mRNA for glutamine synthetase.

ACCESSION X63822

VERSION X63822.1 GI:404326

KEYWORDS glr gene; glutamate-ammonia ligase; glutamine synthetase.

SOURCE Scots pine.

ORGANISM *Pinus sylvestris*
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Coniferopsida; Coniferales; Pinaceae; *Pinus*; *Pinus*.

REFERENCE 1 (bases 1 to 1421)

AUTHORS Canovas, F.M.

TITLE Direct Submission

JOURNAL Submitted (17-DEC-1992) F.M. Canovas, Universidad de Malaga, Lab de Bioquimica y Biologia Molecular, Fac de Ciencias, 29071 Malaga, SPAIN

REFERENCE 2 (bases 1 to 1423)

AUTHORS Canton, F.R., Garcia-Gutierrez, A., Gallardo, F., de Vicente, A. and Canovas, F.M.

TITLE Molecular characterization of a cDNA clone encoding glutamine synthetase from a gymnosperm, *Pinus sylvestris*

JOURNAL Plant Mol. Biol. 22: 25-35, 1993

MEDLINE 93363915

FEATURES

source location:Qualifiers

1..1423

organism="Pinus sylvestris"

db_xref="taxon:3349"

clone="pGS114"

CDS

34..1107

EC_number="6.3.1.2"

codon_start=1

product="glutamate--ammonia ligase"

protein_id="CAA49476.1"

db_xref="GI:404327"

db_xref="SWISS-PROT:F01783"

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BASE COUNT 390 a 265 c 376 g 392 t

ORIGIN

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1381 cgacaaattg tttagaatgt ttgaatatga tataattctt g

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